

## The Institutionalisation of Livestock Protection in the Alps with respect to the Small Scale Agriculture of Switzerland

by  
Daniel Mettler

### The transmission from pilot projects to institutionalisation

The return of the wolf *Canis lupus* to the Alpine arc has renewed an age old conflict between man and carnivores. With an increase in livestock depredation by wolves in the Alps since the early 1990's, several prevention methods have experienced a revival in this region. Reinstating these old traditional methods into modern husbandry system required a lot of developmental work because the traditional knowledge in the Alpine arc had been forgotten, and animal husbandry practices had changed. After the first signs of the return of the wolf to Switzerland in 1995 (Landry 1997), there was a major political discussion and some developmental work with livestock guarding dogs was started (Landry *et al.* 2005). In 1999 the Swiss Agency for the Environment, Forests and Landscape (SAEFL) mandated KORA (Coordinated research projects for the conservation and management of carnivores in Switzerland) to develop prevention measures to minimize livestock depredation by returning wolves (Landry *et al.* 2005). Based on the experience with the lynx *Lynx lynx* since its reintroduction in the early 1970's in the Alps and the Jura Mountains there was experience available about depredation identification, compensation, monitoring, and prevention methods.

### More responsibilities for the livestock husbandry

The return of the wolf soon turned out to be an almost unsolvable problem because of the strong opposition of the rural population. It quickly turned out that the management of the wolf was very different to that of the lynx. Not only in a technical but also in a symbolical way. Based on the experience in the regions where the wolf has already returned to Switzerland and the neighbouring countries like France and Italy, the SAEFL decided in 2003 to anchor the coordination of damage prevention more firmly within the agricultural sector. Therefore, the Service Romand de Vulgarisation Agricole (SRVA, agricultural consultancy service) was mandated by the

SAEFL for a 3-year coordination of the damage prevention in Switzerland ("Livestock protection program"). In 2004 there was therefore a kind of a milestone in the renaissance of damage prevention in Switzerland. By passing the responsibility to the agricultural sector, the first experimental stage had come to an end and a new organisation had been initiated. This organization aims to foster sustainable damage prevention in the different regions and in the agricultural institutions. The aim of the institutional integration is to promote the exchange of experience and knowledge from the experimental stage, and integrate this with scientific knowledge, and the experience from the administration and the livestock breeders.

### A peripheral and flexible organisation of experience

The concept of the new organisation is based on a nationwide net of competence, which is sustained by *livestock protection centres*. At the moment they only exist in the southern cantons (Valais, Ticino and Grisons). Local farmers, who are already experienced in livestock protection, are acting as consultants in these three cantons. Their major task is to advise livestock breeders in the breeding and training of livestock guarding dogs (LGDs). These specialists are working with the agricultural schools, the cantonal authorities and the agricultural information centres. These activities are coordinated by SRVA.

As most of the wolf attacks on livestock happen during the summer (Doutaz & Koenig 2004), when the sheep are summered on alpine pastures, an *intervention group* has been hired (Figure 1.), which is assisting and helping livestock breeders in emergencies. They bring along some LGDs from one of the *livestock protection centre* for an immediate protection of the flocks that suffer wolf attacks. The rapid integration of LGDs into flocks on alpine pastures is a very delicate job which needs a lot of experience and knowledge. After the very restricted assignments so far it is too early to give a general evaluation of its success. For a sustainable protection of the flocks in the case of wolf pack establishment, this method of emergency won't be a realistic option anymore. But at the moment there is no long term solution in sight. Nevertheless one has to bear in mind that Switzerland hasn't yet been colonized by wolf packs, but only by single wolves.

This first aid concept only doesn't meet the need for a continuity of damage prevention on alpine pastures in areas where wolf attacks occur regularly.



**Fig. 1:** The head of the *livestock protection centre* (right) with the herdsman of the *intervention group* and three *Marremmanos* on an alpine pasture. (Photo: Daniel Mettler)

Therefore, the state financially supports the costs associated with maintaining shepherds on alpine pastures. Together with the salaries of shepherds, the cost for night time enclosures is paid as well. Furthermore LGDs are financially supported in order to guarantee maintenance cost. The budget to support the farmers is limited. That's why only sheep owners who have experienced livestock damages (proven wolf damages, see Weber 2004) within the last 3 years will be supported. To prevent the abuse of financial support, 3 categories have been created in the beginning of 2005:

Category 1: Farmers who have damages by large carnivores.

Category 2: Direct neighbours of farms with damages or farmers who have been involved in the livestock protection program.

Category 3: Region with potential habitat for large carnivores.

The financial amount for protection measures will be adapted to the evolution of the large carnivore populations and the political will to support the coexistence of livestock and large carnivores.

### **LGDs as an innovative symbol**

LGDs have been shown to be efficient to decrease livestock depredation throughout the northern hemisphere (Landry 2004). Therefore the promotion and breeding of LGDs will be of high priority in the future. LGDs have become a symbol as a groundbreaking solution for livestock breeders and conservationists in regard to the possible coexistence of carni-

vores and livestock. After more or less positive experiences the expectations are very high to keep wolf attacks on a low level by means of LGDs. Because of the small pastures and the small flock sizes, the potential for conflicts still remains high (Figure 2.).

In July 2004, a LGD working group was constituted to respond to questions like breeding, husbandry and the legal status of LGDs. The main goals of the working group is the elaboration of a stud book and breeding guidelines as well as the formalisation of training and husbandry practices for the two LGD breeds, the *Marremmanos* and the *Great Pyrenees*. Dog specialists from different dog associations and clubs as well as the members of the most important sheep dog associations are members of this group. In the future it will be important to find a pragmatic consensus between the national and cantonal veterinary authorities and the dog associations. Herding dogs as well as LGDs have to be legally accepted as working dogs in order to be able to work safely with livestock.

### **The quest for a sustainable concept between science, practice and policy**

The results of the research and the practical experiences gathered by KORA since the return of the wolf are the basis on which we build as we acquire further experience. These results are published in a KORA report (Burri et al. 2004). Different LGD projects have shown some Do's and Don't's concerning LGD's behaviours (Green & Woodruff 1999, see conclusions in Lüthi and Mettler in this issue). On the other hand, the efficiency of LGDs is very hard to measure and it is not easy to quantify their behaviours systematically. In the context of the transmission from the pilot work to a widely accepted practice within Swiss agriculture, the following unsolved questions remain:

- How should the transfer of the knowledge work if the political opposition, a result of traditional structures and habits, does not accept a change in the practice?
- How can a lasting change take place in the traditional structures if the work load on shepherds and livestock breeders is getting too big?
- Who is bearing the financial consequences of the additional work that will accrue in the livestock husbandry and the administration?

Even if the scientific input at an early stage of a pilot phase is encouraging the adaptation of the breeders, only political will and the financial support



**Fig. 2:** Alpine pasture in the southern part of Switzerland. Due to the small pastures and small flock sizes the potential for conflicts with carnivores is still high. This flock of 1000 sheep, however, is an exception for the norm within Swiss sheep husbandry. (Photo: Daniel Mettler)

for livestock breeders will be responsible for a lasting livestock protection.

### **A lasting outlook for the mountain region**

Agriculture has been evolving for millennia because of technical achievements, cyclical fluctuations, demographic and ecological changes. The return of the wolf is presently forcing a change in the Alps where rural culture is encountering conflicts with natural forces. The return of wild Nature to the Alpine arc and the associated decline of agricultural activities is the result of a socio-economic change. In the last decades, the Swiss policy for the regions and agriculture has initiated different actions to stop the depopulation of the valleys and the loss of agricultural land to reforestation. In the midst of this change, the role of livestock protection remains ambivalent: on the one hand, livestock protection is a response to a natural change, the return of the wolf. On the other hand, livestock protection is trying to protect exactly these animals, which are threatened by these long term changes, the return of wild Nature. An institutionalised livestock protection must challenge itself over and over again. The wolf and the resulting livestock protection is therefore a symbol which is fundamentally challenging the extensive and small scale alpine husbandry.

### **References**

Burri, A., E.-M. Kläy, J.-M. Landry, T. Maddalena, P. Oggier, C. Solari, D. Torriani, et J.-M. Weber.

2004. Rapport final, Projet Loup Suisse – Prévention, 1999 – 2003. Coordinated Research Projects for the Protection and Management of Carnivores in Switzerland (KORA) Report No25, Muri, Switzerland. pp. 124. (In French and German. <http://www.kora.unibe.ch/en/publics/reports.htm>).

Doutaz, J. et A. Koenig. 2004. Le retour du Loup (*Canis lupus L.*) en Suisse : Analyse des données disponibles en vue de la réalisation d'un modèle de distribution potentielle. Coordinated Research Projects for the Protection and Management of Carnivores in Switzerland (KORA) Report No21, Muri, Switzerland. (In French with English and German summaries). <http://www.kora.unibe.ch/en/publics/reports.htm>

Green, J.S. and R.A. Woodruff. 1999. Livestock Guarding Dogs, Protecting Sheep from Predators. USDA Agricultural Information Bulletin 455: 1-32. <http://www.nal.usda.gov/awic/companimals/guarddogs/guarddogs.htm>

Landry, J.-M. 1997. La bête du Val Ferret (*The beast of the Val Ferret*). Coordinated Research Projects for the Protection and Management of Carnivores in Switzerland (KORA) Report No1, Muri, Switzerland.

(In French. <http://www.kora.unibe.ch/en/publics/reports.htm>).

Landry, J.-M. 2004. Synthèse de la littérature sur les chiens de protection. Report for the Swiss Agency for the Environment, Forest and Landscape. IPRA sàrl, Chemin, Switzerland (in French).

Landry, J.-M., A. Burri, D. Torriani, and Ch. Angst. 2005. Livestock Guarding Dogs: a New Experience for Switzerland; Carnivore Damage Prevention News, No 8: 40- 48.

[www.kora.unibe.ch/en/publics/reports.htm](http://www.kora.unibe.ch/en/publics/reports.htm)

Weber, J.-M. 2004. Monitoring loup 1997-2003. Coordinated Research Projects for the Protection and Management of Carnivores in Switzerland (KORA) Report No 27, Muri, Switzerland. pp. 28. (In French. <http://www.kora.unibe.ch/en/publics/reports.htm>).

### **Contact**

Daniel Mettler  
Service romand de vulgarisation agricole (SRVA)  
Protection des troupeaux  
Tel ++41 21 619 44 31  
Fax ++41 21 617 02 61  
Email: [d.mettler@srva.ch](mailto:d.mettler@srva.ch)  
Internet: [www.protectiondestroupeaux.ch](http://www.protectiondestroupeaux.ch)